

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Jerzy Muszynski
For : STATOR WINDING FOR ELECTRIC MOTOR
Our Docket : CMC-12492-1

PRELIMINARY AMENDMENT

Asst. Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Please amend the above referenced patent application as follows:

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 1, line 2, with the following rewritten paragraph:

--This application is a continuation of prior United States Application Serial No. 09/483,985, filed January 18, 2000. The present invention relates to the art of stator windings for electric motors and more particularly to a stator winding for mounting on an outlying stator core. The invention further relates to a method of assembling a stator winding to an outlying stator core of an electric motor.--

IN THE CLAIMS:

Please cancel claims 1-29 and substitute the following claims 30-52 as follows:

30. A multiple piece motor stator having a plurality of individual stator windings for mounting on an electric motor having a rotor mounted for rotation about a longitudinal axis within

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an outlying stator core, each stator winding comprising:

a base having a leg with longitudinally spaced front and rear ends, radially outer and inner
5 ends, and first and second circumferentially opposite sides;

an electrical conductor coil circling said base around said sides and said front and rear ends;
and,

mounting means on said base and said stator core for slidably mounting said individual
stator windings on said stator core.

31. The stator winding of claim 30, wherein said mounting means on said base is spaced
radially outwardly from said radially inner end of said leg.

32. The stator winding of claim 31, wherein said mounting means on said base includes
a connection portion on said radially outer end of said leg having radially spaced outer and inner
ends and longitudinally spaced first and second ends, said connection portion being adapted to
slidably engage a corresponding slot in said stator.

33. The stator winding of claim 32, further including a pole cap at said radially inner end
of said leg.

34. The stator winding of claim 33, wherein said pole cap is a flange extending
circumferentially outwardly from opposite sides of said leg at said radially inner end of said leg.

35. The stator winding of claim 34, wherein said pole cap is removably mounted on said leg.

36. The stator winding of claim 30, wherein said mounting means on said base includes a connection portion on said radially outer end of said leg having radially spaced outer and inner ends and longitudinally spaced first and second ends, said connection portion being adapted to slidingly engage a corresponding slot in said stator.

37. The stator winding of claim 32, wherein said connection portion includes a circumferential protrusion with circumferentially opposite sides spaced radially outwardly from said radially inner end of said connection portion, at least one of said circumferentially opposite sides of said protrusion extending circumferentially outwardly beyond one of said first and second circumferentially opposite sides of said leg.

38. The stator winding of claim 37, wherein said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends with a tapered longitudinal profile therebetween.

39. The stator winding of claim 32, wherein said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends.

40. The stator winding of claim 36, wherein said connection portion has a trapezoidal

profile in cross section.

41. The stator winding of claim 36, wherein said connection portion has a T-shaped profile in cross section.

42. The stator winding of claim 36, wherein said connection portion has a Y-shaped profile in cross section.

43. The stator winding of claim 30, wherein said mounting means includes a connection portion on said base having a cross sectional profile and a slot in said stator core having a cross sectional profile corresponding with said cross sectional profile of said connection portion.

44. The stator winding of claim 43, wherein said connection portion is spaced radially outwardly from said radially inner end of said leg.

45. The stator winding of claim 30, wherein said mounting means includes a connection portion on said leg and a longitudinally extending slot in said stator core adapted to slidably receive said connection portion, said connection portion and said slot including interengaging abutment surfaces adapted to prevent radial disengagement of said stator winding from said stator core.

46. A multiple piece motor stator having a plurality of individual stator windings for mounting on an electric machine having a rotor mounted for rotation about a longitudinal axis within

an outlying stator core, each stator winding comprising:

5 a base including longitudinally spaced front and rear ends, a radially extending leg with radially outer and inner ends and circumferentially opposite sides, and a cross member spaced radially outwardly from said radially inner end of said leg;

an electrical conductor encircling said leg around said sides and said front and rear ends; and,

mounting means on said stator core and said base for slidingly mounting said individual stator windings on said stator.

47. The stator winding of claim 46, wherein said mounting means includes a longitudinally extending slot in said stator core adapted to slidingly receive said cross member.

48. The stator winding of claim 47, wherein said base further includes a pole cap mounted on said radially inner end of said leg.

49. The stator winding of claim 47, wherein said pole cap further includes a flange extending from said leg in circumferentially opposite directions.

50. The stator winding of claim 47, wherein said cross member has longitudinally spaced first and second ends.

51. The stator winding of claim 50, wherein said cross member is circumferentially wider at one of said first and second ends of said cross member than at the other said end.

52. The stator winding of claim 51, wherein said cross member has a longitudinally tapered profile between said first and second ends of said cross member.

52. The stator winding of claim 51, wherein said cross member has a longitudinally tapered profile between said first and second ends of said cross member.

REMARKS

The specification of the above referenced patent application has been amended on page 1 in order to claim priority of prior United States Application Serial No. 09/483,985, filed January 18, 2000. In addition, claims 1-29 have been canceled, and new claims 30-52 have been added. Entrance of these amendments and examination of this application is respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) are captioned **"VERSION WITH MARKINGS TO SHOW CHANGES MADE."**

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

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This application is a continuation of prior United States Application Serial No. 09/483,985, filed January 18, 2000. The present invention relates to the art of stator windings for electric motors and more particularly to a stator winding for mounting on an outlying stator core. The invention further relates to a method of assembling a stator winding to an outlying stator core of an electric motor.

IN THE CLAIMS:

Claims 1-29 have been canceled.

New claims 30-52 have been added as follows:

30. A multiple piece motor stator having a plurality of individual stator windings for mounting on an electric motor having a rotor mounted for rotation about a longitudinal axis within an outlying stator core, each stator winding comprising:

a base having a leg with longitudinally spaced front and rear ends, radially outer and inner ends, and first and second circumferentially opposite sides;

an electrical conductor coil circling said base around said sides and said front and rear ends;
and,

mounting means on said base and said stator core for slidably mounting said individual stator windings on said stator core.

31. The stator winding of claim 30, wherein said mounting means on said base is spaced radially outwardly from said radially inner end of said leg.

32. The stator winding of claim 31, wherein said mounting means on said base includes a connection portion on said radially outer end of said leg having radially spaced outer and inner ends and longitudinally spaced first and second ends, said connection portion being adapted to slidably engage a corresponding slot in said stator.

33. The stator winding of claim 32, further including a pole cap at said radially inner end of said leg.

34. The stator winding of claim 33, wherein said pole cap is a flange extending circumferentially outwardly from opposite sides of said leg at said radially inner end of said leg.

35. The stator winding of claim 34, wherein said pole cap is removably mounted on said leg.

36. The stator winding of claim 30, wherein said mounting means on said base includes a connection portion on said radially outer end of said leg having radially spaced outer and inner ends and longitudinally spaced first and second ends, said connection portion being adapted to slidably engage a corresponding slot in said stator.

37. The stator winding of claim 32, wherein said connection portion includes a circumferential protrusion with circumferentially opposite sides spaced radially outwardly from said radially inner end of said connection portion, at least one of said circumferentially opposite sides of said protrusion extending circumferentially outwardly beyond one of said first and second circumferentially opposite sides of said leg.

38. The stator winding of claim 37, wherein said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends with a tapered longitudinal profile therebetween.

39. The stator winding of claim 32, wherein said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends.

40. The stator winding of claim 36, wherein said connection portion has a trapezoidal profile in cross section.

41. The stator winding of claim 36, wherein said connection portion has a T-shaped profile in cross section.

42. The stator winding of claim 36, wherein said connection portion has a Y-shaped profile in cross section.

43. The stator winding of claim 30, wherein said mounting means includes a connection portion on said base having a cross sectional profile and a slot in said stator core having a cross sectional profile corresponding with said cross sectional profile of said connection portion.

44. The stator winding of claim 43, wherein said connection portion is spaced radially outwardly from said radially inner end of said leg.

45. The stator winding of claim 30, wherein said mounting means includes a connection portion on said leg and a longitudinally extending slot in said stator core adapted to slidably receive said connection portion, said connection portion and said slot including interengaging abutment surfaces adapted to prevent radial disengagement of said stator winding from said stator core.

46. A multiple piece motor stator having a plurality of individual stator windings for mounting on an electric machine having a rotor mounted for rotation about a longitudinal axis within an outlying stator core, each stator winding comprising:

5 a base including longitudinally spaced front and rear ends, a radially extending leg with radially outer and inner ends and circumferentially opposite sides, and a cross member spaced radially outwardly from said radially inner end of said leg;

an electrical conductor encircling said leg around said sides and said front and rear ends; and,

mounting means on said stator core and said base for slidably mounting said individual stator windings on said stator.

47. The stator winding of claim 46, wherein said mounting means includes a longitudinally extending slot in said stator core adapted to slidably receive said cross member.

48. The stator winding of claim 47, wherein said base further includes a pole cap mounted on said radially inner end of said leg.

49. The stator winding of claim 47, wherein said pole cap further includes a flange extending from said leg in circumferentially opposite directions.

50. The stator winding of claim 47, wherein said cross member has longitudinally spaced first and second ends.

51. The stator winding of claim 50, wherein said cross member is circumferentially wider at one of said first and second ends of said cross member than at the other said end.

52. The stator winding of claim 51, wherein said cross member has a longitudinally tapered profile between said first and second ends of said cross member.